Amendments to the Claims:

1. (currently amended) A ~~Piroplasmid~~ protein comprising ~~, characterised in that said protein comprises~~ an amino acid sequence ~~having a similarity of at least 70% with the amino acid sequence depicted in~~ selected from the group consisting of:

i) SEQ ID NO: 2 ~~or~~ ,

ii) immunogenic fragments of SEQ ID NO: 2,

iii) SEQ ID NO: 4,

iv) immunogenic fragments of SEQ ID NO: 4,

v) SEQ ID NO: 6,

vi) immunogenic fragments of SEQ ID NO: 6,

vii) SEQ ID NO: 8,

viii) immunogenic fragments of SEQ ID NO: 8,

ix) SEQ ID NO: 10, [[or an]] and

x) immunogenic fragment of SEQ ID NO: 10;

wherein said protein inhibits invasion of an organism of the family Piroplasmida.

2. -3. (cancelled)

4. (currently amended) A nucleic ~~Nucleic~~ acid, ~~characterised in that~~ wherein said nucleic acid encodes a protein according to claim 1 ~~, or an immunogenic fragment of said protein~~.

5.-6. (cancelled)

7. (currently amended) A cDNA fragment comprising a nucleic acid according to claim 4 ~~one or more of the claims 4 - 6~~.

8. (currently amended) A recombinant ~~Recombinant~~ DNA molecule comprising

i) a nucleic acid according to ~~one or more of the claims 4 - 6~~ claim 4, or

ii) a cDNA fragment ~~according to claim 7 , said nucleic acid or said cDNA fragment being~~ comprising (i);

wherein said cDNA fragment or said nucleic acid is under the control of a functionally linked promoter.

9. (currently amended) A live ~~Live~~ recombinant carrier comprising

i) a nucleic acid according to ~~one or more of the claims 4 - 6~~ claim 4,

ii) a cDNA fragment ~~according to claim 7 , said nucleic acid or said cDNA fragment being under the control of a functionally linked promoter~~ comprising (i),

iii) a recombinant DNA molecule ~~according to claim 8~~ comprising (i), or

iv) a recombinant DNA molecule comprising (ii);

wherein said cDNA fragment or said nucleic acid is under the control of a functionally linked promoter.

10. (currently amended) A host ~~Host~~ cell comprising

i) a nucleic acid according to ~~one or more of the claims 4 - 6~~ claim 4,

ii) a cDNA fragment ~~according to claim 7~~ comprising (i), ~~said nucleic acid or said cDNA fragment being under the control of a functionally linked promoter,~~

iii) a recombinant DNA molecule comprising (i) ~~according to claim 8~~,

iv) a recombinant DNA molecule comprising (ii),

v) ~~or~~ a live recombinant carrier comprising (i),

vi) a live recombinant carrier comprising (ii),

vii) a live recombinant carrier comprising (iii), or

viii) a live recombinant carrier comprising (iv) ~~according to claim 9~~;

wherein said nucleic acid or said cDNA fragment are under the control of a functionally linked promoter.

11. (currently amended) A vaccine ~~Vaccine~~ comprising a protein according to claim 1 ~~one or more of the claims 1 - 3 or an immunogenic fragment of said protein, a nucleic acid according to one or more of the claims 4 - 6, a cDNA fragment according to claim 7, a recombinant DNA molecule according to claim 8, a live recombinant carrier according to claim 9, or a host cell according to claim 10, or a combination thereof,~~ and a pharmaceutically acceptable carrier.

12. (currently amended) The vaccine ~~Vaccine~~ according to claim 11, ~~characterised in that said vaccine comprises~~ further comprising an adjuvant.

13. (currently amended) The vaccine ~~Vaccine~~ according to claim 11, ~~one or more of the claims 11 - 12, characterised in that said vaccine comprises~~ further comprising an additional immunoactive component or a nucleic acid encoding said additional immunoactive component.

14. (currently amended) A vaccine comprising ~~Vaccine, characterised in that said vaccine comprises~~ an antibody against a protein according to claim 1 ~~one or more of the claims 1 - 3 or an antibody against an immunogenic fragment of said protein, or a combination thereof,~~ and a pharmaceutically acceptable carrier.

15. (cancelled)

16. (currently amended) A ~~Use of a protein according to one or more of the claims 1 - 3 or an immunogenic fragment of said protein for the manufacture of a vaccine for~~ prophylactic or therapeutic treatment of an infection or its clinical signs caused by a Piroplasmid organism comprising administering a vaccine comprising a protein according to claim 1.

17. (currently amended) A ~~Use of a nucleic acid sequence according to one or more of the claims 4 - 6, a cDNA fragment according to claim 7, a recombinant DNA molecule according to claim 8, a live recombinant carrier according to claim 9, or a host cell according to claim 10 for~~

~~the manufacture of a vaccine for~~ prophylactic or therapeutic treatment of an infection or its clinical signs caused by a Piroplasmid organism comprising administering a vaccine comprising a nucleic acid according to claim 4.

18. (currently amended) A diagnostic ~~Diagnostic~~ test for the detection of a nucleic acid associated with a Piroplasmid organism comprising

(i) ~~, characterised in that the test comprises a nucleic acid, said nucleic acid being at least 70 % similar to the~~ a nucleic acid sequence depicted in SEQ ID NO: 1, 3, 5, 7, or 9, ~~or~~

(ii) a nucleic acid that is complementary to (i) ~~said nucleic acid~~, or

(iii) a nucleic acid that hybridises to (i) under stringent conditions;

wherein ~~either of the nucleic acids~~ (i), (ii) and (iii) each have a length of at least 15 nucleotides.

19. (currently amended) A diagnostic ~~Diagnostic~~ test for the detection of antibodies against a Piroplasmid organism comprising ~~, characterised in that said test comprises~~ a protein according to claim 1 ~~one or more of the claims 1 – 3, or an immunogenic fragment of said protein, or a combination thereof~~.

20. (currently amended) A diagnostic ~~Diagnostic~~ test for the detection of antigenic material from a Piroplasmid organism comprising ~~, characterised in that said test comprises~~ an antibody against a protein according to claim 1 ~~one or more of the claims 1 – 3 or an antibody against an immunogenic fragment of said protein, or a combination thereof~~.

21. (new) A vaccine comprising a nucleic acid according to claim 4 and a pharmaceutically acceptable carrier.

22. (new) A vaccine comprising a cDNA fragment according to claim 7 and a pharmaceutically acceptable carrier.

23. (new) A vaccine comprising a recombinant DNA molecule according to claim 8 and a pharmaceutically acceptable carrier.

24. (new) A vaccine comprising a live recombinant carrier according to claim 9 and a pharmaceutically acceptable carrier.

25. (new) A vaccine comprising a host cell according to claim 10 and a pharmaceutically acceptable carrier.